IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

ERICSSON INC., et al., **Plaintiffs,** **vs.** **D-LINK CORPORATION, et al.,** **Defendants.**	**Civil Action No. 6:10-cv-473** **JURY TRIAL DEMANDED**

ERICSSON'S REPLY CLAIM CONSTRUCTION BRIEF

I. ARGUMENT IN REPLY

Remarkably, the Defendants criticize Ericsson's recitation of long-standing principles of claim construction in its Opening Brief as not being binding or "contemporary." *See* Responsive Brief (Dkt. No. 225) at 2. The Defendants specifically attack the claim construction principle that limitations cannot be imported from the specification into a claim absent express disclaimer or disavowal. *See* Responsive Brief at 2. The reason the Defendants advocate for an undefined, contemporary approach to claim construction is clear—they attempt to rewrite the claims by importing limitations from the specification where there has been neither disclaimer nor disavowal. But the Defendants are simply wrong in their belief that long-standing principles of claim construction have been replaced with something more "contemporary." As recently as February of this year, the Federal Circuit reaffirmed the long-standing principles of claim construction in unequivocal terms:

> We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that. To constitute disclaimer, there must be a clear and unmistakable disclaimer.

See Thorner v. Sony Computer Entm't Am. LLC, 669 F.3d 1362, 1366-1367 (Fed. Cir. 2012); *see also id*. at 1365 (There are "two exceptions" to the general rule that the plain meaning of the claim controls: "1) when a patentee sets out a definition and acts as his own lexicographer, or 2) when the patentee disavows the full scope of a claim term either in the specification or during prosecution."). The Defendants' proposed constructions, which depend on their incorrect, "contemporary" view of claim construction, should be rejected.[1]

[1] Ericsson intends to dismiss U.S. Patent No. 5,771,468 (the "'468 patent") from the case. As such, this brief does not address Defendants' arguments regarding the '468 patent.

A. U.S. Patent No. 6,772,215

1. "responsive to the receiving step, constructing a message field . . . including a type identifier field"

The Defendants attempt to justify their attempts to inject extraneous limitations into the claims by arguing that the title of the patent, the abstract, the specification, etc. are all consistent with their proposed construction. *See* Responsive Brief at 12. This misses the point. The Defendants do not point to any lexicography, disclaimer, or disavowal that would require the claims be limited to include these limitations, and as such, their proposed construction should be rejected. *See Thorner*, 669 F.3d at 1366-1367 (Fed. Cir. 2012) ("We do not read limitations from the specification into claims; we do not redefine words. Only the patentee can do that. To constitute disclaimer, there must be a clear and unmistakable disclaimer."). Similarly, the Court should reject the Defendants' *ipse dixit* assertion that the limitation they seek to inject into the claims "is the allegedly inventive step," *see* Responsive Brief at 14; and "is the invention." The claims of the patent define the invention, and they do not include the Defendants' extraneous limitation.

2. "means for receiving said plurality of first data units, and constructing . . ."

The Defendants argue that their proposed function is the same "in substance" as the function cited for this term. Not so. The Defendants' proposed function contains limitations not found in this claim term and is therefore legally defective. *See Micro Chem., Inc. v. Great Plains Chemical Co., Inc.*, 194 F.3d 1250, 1258 (Fed. Cir. 1999) ("The statute [35 U.S.C. § 112 ¶ 6] does not permit limitation of a means-plus-function claim by adopting a function different from that **explicitly recited** in the claim.") (emphasis added). As for structure, the Defendants' proposed construction ignores and omits structure disclosed in the specification that performs the recited function. (The Defendants, in turn, assert that this structure is missing and that the claims

are therefore invalid.) Ericsson's proposed construction, in contrast, includes all corresponding structure and should be adopted.

B. U.S. Patent No. 6,330,435

1. "data packet discard notification message from the transmitter to the receiver indicating data packets the transmitter has discarded"

a) Defendants' Construction Requires the Explicit Identification of Discarded Data Packets.

In its Opening Brief, Ericsson explained that (1) the claim language itself, (2) the specification, and (3) the doctrine of claim differentiation, all support the conclusion that the discard notification message need **not** explicitly identify data packets discarded at the transmitter. Defendants agree. Responsive Brief at 7. In fact, Defendants argue that their construction also does not require the explicit identification of discarded data packets. *Id.* Yet the words of Defendants' proposal belie this interpretation.

With their brief, Defendants now try to distance themselves from the actual words of their construction. Defendants propose that the discard message "**contain the identity** of unacknowledged data packets." The "identity" is just that — an explicit identification. It strains logic to suggest that this phrase means anything other than containing an explicit identification. In other words, although Defendants may say that their construction does not require the explicit identification of data packets, that is the plain meaning of the phrase "containing the identity" in their construction. [2]

To support their proposal, Defendants assert that the plain and ordinary term "indicating" requires special construction. They argue that the Court must "explain[] what 'indicating' means in the context of the claims" because otherwise it would be ambiguous and confusing.

[2] Further, Defendants' concession is a hollow one as Markman arguments are commonly the subject of motions in limine and excluded from presentation to the jury. Therefore, in the absence of Defendants' explanation, the jury will be left with the plain meaning of "containing the identity," which is problematic for the reasons noted above.

Responsive Brief at 6-7. However, this is both factually inaccurate and contrary to established case law. First, the jury understands plain English words like "indicating." It is neither vague nor ambiguous. Second, it is well recognized that the Court need not provide additional guidance on the construction of every claim term, especially those that merely comport with "the widely accepted meaning of commonly understood words." *Phillips*, 415 F.3d at 1312; *see also Vision Advancement, LLC v. Vistakon*, No. 2:05-CV-455, 2007 U.S. Dist. LEXIS 5742, at *34-39 (E.D. Tex. Jan. 26, 2007) (holding that a number of claim terms did not require construction because their plain meaning was clear and understandable). "Indicating" is just such a term, a commonly understood word with a clear and understandable meaning. The Court should therefore reject Defendants' construction.

b) Defendants' "Unacknowledged" Term Reads Out a Preferred Embodiment.

The Court should reject Defendants' use of the word "unacknowledged" because it again reads out a preferred embodiment. As an initial matter, a packet can only be in one of two states: (1) acknowledged or (2) unacknowledged.[3] The specification describes the "acknowledged" state as one where the receiver has incorrectly received a data packet and sends a "negative acknowledgement" or "NACK" to the transmitter. '435 patent at 1:10-24. In contrast, the specification describes the "unacknowledged" state as one where the receiver has not received a data packet at all, and thus the transmission has "timed out." *Id.* In response to both a NACK and a time out, the transmitter may try to resend the data packet to the receiver. *Id.* at 4:53-65

[3] The specification repeatedly describes an acknowledged state as a NACK and the unacknowledged state as a time out. *See, e.g.*, 1:14-20 ("some messages . . . sent by a transmitter to a receiver [] are negatively acknowledged (NACKed) or remain unacknowledged by the receiver after a predetermined amount of time"); 1:22-24 ("A NACK or a timing out can operate as a request from the receiver to the transmitter to retransmit the corresponding message."); Abstract ("The DPDN message can be sent when the transmitter discards packets. The DPDN message can also be sent in response to a communication such as a request or negative acknowledgement that is sent by the receiver to the transmitter.").

and 5:6-26. Thus, the specification and its preferred embodiments recognize that the discard messages of the '435 patent may apply equally to both acknowledged and unacknowledged packets. In fact, the first embodiment described in the specification is the acknowledgement embodiment.

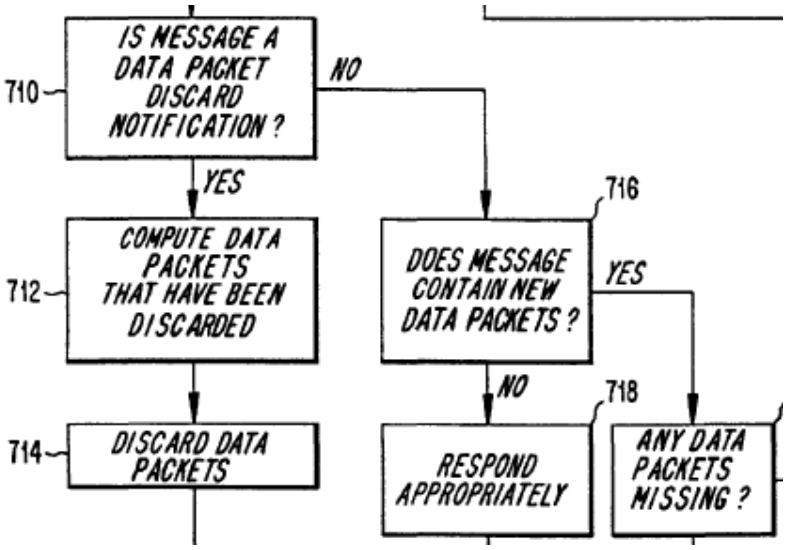
> If at step 812 the transmitter determines that the message is a retransmission request [(i.e., a negative acknowledgement)], then control flows from step 812 to step 816, where the transmitter determines whether any of the cells requested by the receiver have been discarded. . . . If at step 816 the transmitter determines that one or more of the cells requested by the receiver has been discarded, then control proceeds to step 818 where the transmitter sends a CDN message [(i.e., a data packet discard notification message)] to the receiver, indicating that the cells have been discarded.

'435 patent at 4:53-65. Defendants' construction precludes the above scenario where the transmitter sends a discard message in response to a negative acknowledgement, because that packet is no longer "unacknowledged." Rather, it is acknowledged with a negative acknowledgement. Because Defendants' construction would preclude this first embodiment, it should be rejected. *See Globetrotter Software, Inc. v. Elan Computer Group, Inc.*, 362 F.3d 1367, 1381 (Fed. Cir. 2004) ("A claim interpretation that excludes a preferred embodiment from the scope of the claim is rarely, if ever, correct.") (inner quotation omitted).

c) The Discard Notification Message is a Control Message in an ARQ Protocol.

Rather than construe straightforward terms like "indicating" such as Defendants propose, Ericsson seeks to define what the jury would likely be unfamiliar with — a data packet discard notification message. Ericsson defines this portion of the claim element as "a control message in an Automatic Repeat Request protocol." Contrary to Defendants' arguments, the specification supports Ericsson's inclusion of "a control message" in its construction. The specification differentiates between discard messages (control messages) and traditional data packets

(messages containing payload data such as voice, video, or text). That is because the receiver treats these two types of messages differently, as shown in Figure 7 (relevant portion depicted below).



If the message is a discard message, the receiver "computes which cells have been discarded based on the received CDN message." '435 patent at 4:1-4. On the other hand, if the message is a traditional data packet (*i.e.*, a "message [that] contains new data packets"), then the receiver performs different actions. The receiver will "determine[] whether any new cells are incorrectly received or missing . . . [and] request[] retransmission of the incorrectly received or missing cells." *Id.* at 4:23-30. Moreover, the specification describes a discard message with special identifying information in the header to distinguish it from a traditional data packet. *Id.* at 2:45-48. Ericsson's construction simply seeks to distinguish between different types of messages — those that are discard messages and those that contain data packets of voice, video, text information.

Defendants also argue that because a phrase is contained in the preamble, it cannot be used to aid in understanding a claim term. Responsive Brief at 8. However, Defendants

provided no case law to support their position. Furthermore, Defendants' argument is inconsistent with their own proposed claim constructions for other Patents-in-Suit. For example, Defendants' proposed construction of "telecommunications system" in the '468 Patent uses the term "system standard[]," which is contained in the preamble of claim 1. *See id.* at 32-34. Although Defendants' proposed construction for "telecommunications system" is improper for numerous other reasons, it is not incorrect simply because it uses words that happen to be located in the preamble. *See* Opening Brief (Dkt. No. 209) at 25-26. Defendants cannot have it both ways, including words from preambles in their construction when it suits them and yet arguing that it is improper in the context of the '435 patent. Ericsson's claim construction appropriately defines technical terms instead of straightforward ones and should therefore be adopted by the Court.

C. U.S. Patent Nos. 5,987,019 and 6,466,568

1. "separate from said first field"

Defendants' concede that the Court's constructions for these terms should not be limited to a TDMA embodiment. Nonetheless, Defendants' proposed construction for this term is an attempt to read limitations from the TDMA embodiment into the claims. In that embodiment, a separate radio channel—the fast out-of-bound channel ("FOC")—is used to transmit the service type identifier. Defendants argue that because this embodiment sends information using two different radio channels, all of the asserted claims should require sending information over two different radio channels. This interpretation conflicts with the plain language of the claims which require transmitting the first field and the second field "on said radio channel," i.e., the same radio channel. Thus, the "separate from" limitation cannot require transmitting fields on separate radio channels.

Defendants also argue that the service type identifier must be "accessible to the receiver without the receiver knowing the transmission characteristics of the payload information." *See* Responsive Brief at 18. Ericsson agrees. The purpose of the service type identifier is to convey transmission characteristics. However, the service type identifier can achieve this purpose without being located on a separate radio channel. Whether the service type identifier is located on the same or a different channel from the payload, the receiver can analyze the service type identifier before analyzing the payload. For example, a receiver can analyze the header of a data packet before analyzing the payload of the data packet.

This argument is another attempt to read in limitations from the exemplary TDMA embodiment. In TDMA, relevant transmission characteristics such as error protection and delay tolerance can be controlled by using different channel coding and interleaving techniques. Thus, in a TDMA embodiment where the service type identifier identifies only channel coding information, the service type identifier would need to be located on a separate channel. However, the asserted claims are not limited to that embodiment. In fact, as defendants point out, during prosecution the applicants clarified that claim 1 of the '568 patent is not limited to identifying channel coding information. *See* Responsive Brief at 23 (quoting '568 patent prosecution history, Doc. No. 209-12 at pg. 5).

2. "a service type identifier which identifies a type of payload information"

There is no dispute that the service type identifier must identify the type of payload information. The parties' dispute what this phrase means. The patent offers some examples of types of information (voice, video, data), but it also explains that the claimed invention is not limited to those examples. In order to avoid limiting the asserted claims to the preferred embodiment, the Court's construction must explain what it means to identify a type of payload information. The inventors tried to address this issue by explaining that key requirement of the

service type identifier is identifying transmission characteristics for various types of information. *See generally* Opening Brief at 21. Accordingly, Ericsson's proposal clarifies that the service type identifier identifies of transmission characteristics.

When discussing the "separate from" limitation, Defendants agree that the "heart of the invention" is communicating transmission characteristics using a service type identifier separate from the payload. Without explanation, Defendants take the opposite position with respect to the "service type identifier limitation." Because Defendants offer no justification for these inconsistent positions, the Court should reject Defendants' proposed construction.

The prosecution history statements cited by Defendants support Ericsson's construction. During prosecution, the PTO rejected applicants claims based on the Raith reference. According to the examiner, Raith disclosed using a separate field to identify channel coding information for a payload. In response to the examiner's argument, the inventors explained that the service type identifier identifies transmission characteristics, not merely channel coding information. While channel coding can contribute to transmission characteristics for a payload type, identification of channel coding does not inherently disclose the transmission characteristics of a type of payload.

D. U.S. Patent No. 5,790,516

1. "pulseshaping waveform"

Not every waveform that changes the shape of a signal is a pulseshaping waveform as claimed in the '516 patent. The Defendants attempt to argue that definitions for pulseshaping from extrinsic sources should control the construction of this term. *See* Responsive Brief at 27. This ignores, however, that the '516 patent teaches a pulseshaping waveform that lessens the effect of both time dispersion and intersymbol interference. *See* '516 patent at 3:65-4:4. In other words, one skilled in the art would not view pulseshaping waveforms to be a waveform that makes *any* change to the shape of a signal after reading the '516 patent and is therefore incorrect.

See Phillips v. AWH Corp., 415 F.3d 1303, 1321 (Fed. Cir. 2005) ("[T]the 'ordinary meaning' of a claim term is its meaning to the ordinary artisan **after reading the entire patent**.") (emphasis added).

The Defendants criticize Ericsson's proposed construction because it defines a term by its effect. This criticism ignores, of course, that the Defendants' proposed construction similarly attempts to define this term by its effect, i.e., changing the shape of a signal. More importantly, this criticism is unfounded. The '516 patent gives specific examples of pulseshaping waveforms that lessen the effects of time dispersion and intersymbol interference, but the claims are not limited to these examples. Rather, any waveform that lessens the effects of time dispersion and intersymbol interference are "pulseshaping waveforms" as taught by the '516 patent, and vice versa.

2. "performing an N'-point inverse fast Fourier transform (IFFT)"

This claim term is "performing an N'-*point* inverse fast Fourier transform (IFFT)"—not "performing an N'-*subcarrier* inverse fast Fourier transform (IFFT)." The Defendants improperly try to rewrite this claim term by replacing "point" with "subcarrier" by arguing that this change is meaningless. But if this change were truly meaningless, then the Defendants would presumably have no problem with Ericsson's proposed language of "IFFT points" rather than their language of "subcarriers."

The second problem with the Defendants' proposed construction is that it refers to N' as "***adjusted*** . . . depending on the pulseshaping waveform used." In its Opening Claim Construction brief, Ericsson squarely laid out a specific concern with this language—particularly, that it suggests that proof of infringement under the Defendants' proposed construction would require a comparison between the IFFT for a pulseshaping waveform actually used against an IFFT for some other pulseshaping waveform (or none at all). Tellingly,

the Defendants attempt to side-step this issue by arguing that their proposed construction is "simply using the applicants' definition." *See* Responsive Brief at 31. This statement does not address Ericsson's concern at all. Erissson's proposed construction, in contrast, would not require any comparison yet still acknowledges that N' refers to the number of IFFT points that are required as a result of the pulseshaping waveform used, as the '516 patent teaches. *See* '516 patent at 7:5–10.

II. CONCLUSION

For the foregoing reasons, Ericsson respectfully requests that the Court adopt its proposed constructions of the disputed claim terms, and reject those proposed by Defendants.

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Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies that, on June 15, 2012, the foregoing document was served via the Court's ECF system on all counsel who has filed notices of appearance in this case.

/s/ Theodore Stevenson III
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